

6560-50-P

#### ENVIRONMENTAL PROTECTION AGENCY

### **40 CFR Part 52**

[EPA-R03-OAR-2017-0578; FRL-9975-87-Region 3]

Approval and Promulgation of Air Quality Implementation Plans; Pennsylvania; Attainment Plan for the Warren, Pennsylvania Nonattainment Area for the 2010 Sulfur Dioxide Primary National Ambient Air Quality Standard

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve a state implementation plan (SIP) revision, submitted by the Commonwealth of Pennsylvania through the Pennsylvania Department of Environmental Protection (PADEP), to EPA on September 29, 2017, for the purpose of providing for attainment of the 2010 1-hour sulfur dioxide (SO<sub>2</sub>) primary national ambient air quality standard (NAAQS) in the Warren, Pennsylvania SO<sub>2</sub> nonattainment area (hereafter referred to as the "Warren Area" or "Area"). The Warren Area is comprised of a portion of Warren County (Conewango Township, Glade Township, Pleasant Township, and the City of Warren) in Pennsylvania surrounding the United Refining Company (hereafter referred to as "United Refining"). The SIP submission is an attainment plan which includes the base year emissions inventory, an analysis of the reasonably available control technology (RACT) and reasonably available control measure (RACM) requirements, a reasonable further progress (RFP) plan, a modeling demonstration of SO<sub>2</sub> attainment, contingency measures, and a nonattainment new source review (NNSR) program for the Warren Area. As part of approving the attainment plan, EPA is also proposing to approve into the

Pennsylvania SIP new SO<sub>2</sub> emission limits and associated compliance parameters for United Refining. EPA proposes to approve Pennsylvania's attainment plan and concludes that the Warren Area will attain the 2010 1-hour primary SO<sub>2</sub> NAAQS by the applicable attainment date and that the plan meets all applicable requirements under the Clean Air Act (CAA).

**DATES:** Written comments must be received on or before [insert date 30 days after date of publication in the Federal Register].

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R03-OAR-2017-0578 at http://www.regulations.gov, or via email to spielberger.susan@epa.gov. For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be confidential business information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the "For Further Information Contact" section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit http://www2.epa.gov/dockets/commenting-epadockets.

FOR FURTHER INFORMATION CONTACT: Irene Shandruk, (215) 814-2166, or by e-

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### **SUPPLEMENTARY INFORMATION:**

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# I. Background for EPA's Proposed Action

On June 2, 2010, the EPA Administrator signed a final rule establishing a new SO<sub>2</sub> primary NAAQS as a 1-hour standard of 75 parts per billion (ppb), based on a 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. *See* 75 FR 35520 (June 22, 2010), codified at 40 CFR 50.17. This action also revoked the existing 1971 primary annual and 24-hour standards, subject to certain conditions. EPA established the NAAQS based on significant evidence and numerous health studies demonstrating that serious health effects are associated with short-term exposures to SO<sub>2</sub> emissions ranging from 5 minutes to 24 hours with an array of adverse respiratory effects including narrowing of the airways which can cause difficulty breathing (bronchoconstriction) and increased asthma symptoms. For more

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 $<sup>^1</sup>$  EPA's June 22, 2010, final action revoked the two 1971 primary 24-hour standard of 140 ppb and the annual standard of 30 ppb because they were determined not to add additional public health protection given a 1-hour standard at 75 ppb. *See* 75 FR 35520. However, the secondary 3-hour SO<sub>2</sub> standard was retained. Currently, the 24-hour and annual standards are only revoked for certain of those areas the EPA has already designated for the 2010 1-hour SO<sub>2</sub> NAAQS. *See* 40 CFR 50.4(e).

information regarding the health impacts of SO<sub>2</sub>, please refer to the June 22, 2010 final rulemaking. *See* 75 FR 35520. Following promulgation of a new or revised NAAQS, EPA is required by the CAA to designate areas throughout the United States as attaining or not attaining the NAAQS; this designation process is described in section 107(d)(1) of the CAA. On August 5, 2013, EPA promulgated initial air quality designations for 29 areas for the 2010 SO<sub>2</sub> NAAQS (78 FR 47191), which became effective on October 4, 2013, based on violating air quality monitoring data for calendar years 2009–2011, where there were sufficient data to support a nonattainment designation.<sup>2</sup>

Effective on October 4, 2013, the Warren Area was designated as nonattainment for the 2010 SO<sub>2</sub> NAAQS for an area that encompasses the primary SO<sub>2</sub> emitting source United Refining and the nearby SO<sub>2</sub> monitor (Air Quality Site ID: 42-123-0004). The October 4, 2013 final designation triggered a requirement for Pennsylvania to submit a SIP revision with an attainment plan for how the Area would attain the 2010 SO<sub>2</sub> NAAQS as expeditiously as practicable, but no later than October 4, 2018, in accordance with CAA section 172(b).

For a number of areas, including the Warren Area, EPA published a notice on March 18, 2016, that Pennsylvania and other pertinent states had failed to submit the required SO<sub>2</sub> attainment plan by this submittal deadline. *See* 81 FR 14736. This finding initiated a deadline under CAA section 179(a) for the potential imposition of new source review and highway funding sanctions. However, pursuant to Pennsylvania's submittal of September 29, 2017, and EPA's subsequent letter dated October 5, 2017, to Pennsylvania finding the submittal complete and noting the

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<sup>&</sup>lt;sup>2</sup> EPA is continuing its designation efforts for the 2010 SO<sub>2</sub> NAAQS. Pursuant to a court-order entered on March 2, 2015, by the U.S. District Court for the Northern District of California, EPA must complete the remaining designations for the rest of the country on a schedule that contains three specific deadlines. Sierra Club, et al. v. Environmental Protection Agency, 13–cv–03953–SI (2015).

stopping of the sanctions deadline, these sanctions under section 179(a) will not be imposed as a consequence of Pennsylvania's having missed the SIP submission deadline. Additionally, under CAA section 110(c), the March 18, 2016 finding triggers a requirement that EPA promulgate a federal implementation plan (FIP) within two years of the effective date of the finding unless, by that time, the state has made the necessary complete submittal and EPA has approved the submittal as meeting applicable requirements. This FIP obligation will not apply if EPA makes final the approval action proposed here by April 18, 2018.

Attainment plans must meet the applicable requirements of the CAA, and specifically CAA sections 172, 191, and 192. The required components of an attainment plan submittal are listed in section 172(c) of Title I, part D of the CAA. On April 23, 2014, EPA issued recommended guidance (hereafter 2014 SO<sub>2</sub> Nonattainment Guidance) for how state submissions could address the statutory requirements for SO<sub>2</sub> attainment plans.<sup>3</sup> In this guidance, EPA described the statutory requirements for an attainment plan, which include: an accurate base year emissions inventory of current emissions for all sources of SO<sub>2</sub> within the nonattainment area (172(c)(3)); an attainment demonstration that includes a modeling analysis showing that the enforceable emissions limitations and other control measures taken by the state will provide for expeditious attainment of the NAAQS (172(c)); demonstration of RFP (172(c)(2)); implementation of RACM, including RACT (172(c)(1)); NNSR requirements (172(c)(5)); and adequate contingency measures for the affected area (172(c)(9)).

### II. Pennsylvania's Attainment Plan Submittal for the Warren Area

In accordance with section 172(c) of the CAA, the Pennsylvania attainment plan for the Warren

<sup>&</sup>lt;sup>3</sup> See "Guidance for 1-Hour SO<sub>2</sub> Nonattainment Area SIP Submissions" (April 23, 2014), available at <a href="https://www.epa.gov/sites/production/files/2016-06/documents/20140423guidance nonattainment sip.pdf">https://www.epa.gov/sites/production/files/2016-06/documents/20140423guidance nonattainment sip.pdf</a>.

Area includes: (1) An emissions inventory for SO<sub>2</sub> for the plan's base year (2011); and (2) an attainment demonstration. The attainment demonstration includes the following: Analyses that locate, identify, and quantify sources of emissions contributing to violations of the 2010 SO<sub>2</sub> NAAQS; a determination that the control strategy for the primary SO<sub>2</sub> source within the nonattainment areas constitutes RACM/RACT; a dispersion modeling analysis of an emissions control strategy for the primary SO<sub>2</sub> source (United Refining), which also accounts for smaller sources within the Area in the background concentration, showing attainment of the SO<sub>2</sub> NAAQS by the October 4, 2018, attainment date; requirements for RFP toward attaining the SO<sub>2</sub> NAAQS in the Area; contingency measures; the assertion that Pennsylvania's existing SIP-approved NSR program meets the applicable requirements for SO<sub>2</sub>; and the request that emission limitations and compliance parameters for United Refining be incorporated into the SIP.

# III. EPA's Analysis of Pennsylvania's Attainment Plan for the Warren Area

Consistent with CAA requirements (*see* section 172), an attainment demonstration for an SO<sub>2</sub> nonattainment area must include a showing that the area will attain the 2010 SO<sub>2</sub> NAAQS as expeditiously as practicable. The demonstration must also meet the requirements of 40 CFR 51.112 and 40 CFR part 51, Appendix W, and include inventory data, modeling results, and emissions reductions analyses on which the state has based its projected attainment. EPA is proposing to conclude that the attainment plan submitted by Pennsylvania meets all applicable requirements of the CAA, and EPA is proposing to approve the plan submitted by Pennsylvania to ensure ongoing attainment in the Warren Area.

### A. Pollutants Addressed

Pennsylvania's SO<sub>2</sub> attainment plan evaluates SO<sub>2</sub> emissions for the area within the portion of Warren County (Conewango Township, Glade Township, Pleasant Township, and the City of

Warren) that is designated nonattainment for the 2010 SO<sub>2</sub> NAAQS. There are no precursors to consider for the SO<sub>2</sub> attainment plan. SO<sub>2</sub> is a pollutant that arises from direct emissions, and therefore concentrations are highest relatively close to the sources and much lower at greater distances due to dispersion. Thus, SO<sub>2</sub> concentration patterns resemble those of other directly emitted pollutants like lead, and differ from those of photochemically-formed (secondary) pollutants such as ozone. Pennsylvania's attainment plan appropriately considered SO<sub>2</sub> emissions for the Indiana Area.

### **B.** Emissions Inventory Requirements

States are required under section 172(c)(3) of the CAA to develop comprehensive, accurate and current emissions inventories of all sources of the relevant pollutant or pollutants in the nonattainment area. These inventories provide detailed accounting of all emissions and emissions sources by precursor or pollutant. In addition, inventories are used in air quality modeling to demonstrate that attainment of the NAAQS is as expeditious as practicable. The 2014 SO<sub>2</sub> Nonattainment Guidance provides that the emissions inventory should be consistent with the Air Emissions Reporting Requirements (AERR) at Subpart A to 40 CFR part 51.<sup>4</sup>

For the base year inventory of actual emissions, a "comprehensive, accurate and current" inventory can be represented by a year that contributed to the three-year design value used for the original nonattainment designation. The  $2014~SO_2$  Nonattainment Guidance notes that the base year inventory should include all sources of  $SO_2$  in the nonattainment area as well as any sources located outside the nonattainment area which may affect attainment in the area.

Pennsylvania appropriately elected to use 2011 as the base year. Actual emissions from all the

<sup>&</sup>lt;sup>4</sup> The AERR at Subpart A to 40 CFR part 51 cover overarching federal reporting requirements for the states to submit emissions inventories for criteria pollutants to EPA's Emissions Inventory System. EPA uses these submittals, along with other data sources, to build the National Emissions Inventory.

sources of SO<sub>2</sub> in the Warren Area were reviewed and compiled for the base year emissions inventory requirement. The primary SO<sub>2</sub>-emitting point source located within the Warren Area is United Refining, a petroleum refinery. United Refining consists of 29 main SO<sub>2</sub> emitters, which include boilers, heaters, reboilers, compressors, and flares. More information on the emissions inventory for the Warren Area can be found in Pennsylvania's September 29, 2017, submittal as well as EPA's emissions inventory Technical Support Document (TSD), which can be found under Docket ID No. EPA-R03-OAR-2017-0578 and which provides EPA's analysis of the emissions inventory.

Table 1 shows the level of emissions, expressed in tons per year (tpy), in the Warren Area for the 2011 base year by emissions source category. The point source category includes all sources within the nonattainment area.

Table 1. 2011 Base Year SO<sub>2</sub> Emissions Inventory for the Warren Area

<b>Emission Source Category</b>	SO <sub>2</sub> Emissions (tpy)
Point	993.095
Area	85.852
Non-road	0.337
On-road	1.380
Total	1,080.664

EPA has evaluated Pennsylvania's 2011 base year emissions inventory for the Warren Area and has made the determination that this inventory was developed in a manner consistent with EPA's guidance. Therefore, pursuant to section 172(c)(3), EPA is proposing to approve Pennsylvania's 2011 base year emissions inventory for the Warren Area.

The attainment demonstration also provides for a projected attainment year inventory that includes estimated emissions for all emission sources of SO<sub>2</sub> which are determined to impact the nonattainment area for the year in which the area is expected to attain the NAAQS.

Pennsylvania provided a 2018 projected emissions inventory for all known sources included in the 2011 base year inventory. The projected 2018 emissions are shown in Table 2. Pennsylvania's submittal asserts that the SO<sub>2</sub> emissions are expected to decrease by approximately 436 tons, or 40%, by 2018 from the 2011 base year. More information on the projected emissions for the Warren Area can be found in Pennsylvania's September 29, 2017, submittal, and EPA's analysis of the emissions inventories can be found in EPA's emissions inventory TSD, which can be found under Docket ID No. EPA-R03-OAR-2017-0578. EPA proposes to approve the 2011 base year inventory and the 2018 projected inventory as they meet CAA requirements.

Table 2. 2018 Projected SO<sub>2</sub> Emission Inventory for the Warren Area

Emission Source Category	SO <sub>2</sub> Emissions (tpy)
Point	511.199
Area	132.48
Non-road	0.170
On-road	0.530
Total	644.379

### C. Air Quality Modeling

The SO<sub>2</sub> attainment demonstration provides an air quality dispersion modeling analysis to demonstrate that control strategies chosen to reduce SO<sub>2</sub> source emissions will bring the Area into attainment by the statutory attainment date of October 4, 2018. The modeling analysis, following recommendations outlined in Appendix W to 40 CFR part 51 (EPA's Modeling Guidance), is used for the attainment demonstration to assess the control strategy for a nonattainment area and establish emission limits that will provide for attainment. The analysis requires five years of meteorological data to simulate the dispersion of pollutant plumes from multiple point, area, or volume sources across the averaging times of interest. The modeling demonstration typically also relies on maximum allowable emissions from sources in the

nonattainment area. Though the actual emissions are likely to be below the allowable emissions, sources have the ability to run at higher production rates or optimize controls such that emissions approach the allowable emissions limits. A modeling analysis that provides for attainment under all scenarios of operation for each source must therefore consider the worst case scenario of both the meteorology (e.g. predominant wind directions, stagnation, etc.) and the maximum allowable emissions.

PADEP's modeling analysis was developed in accordance with EPA's Modeling Guidance and the 2014 SO<sub>2</sub> Nonattainment Guidance, and was prepared using EPA's preferred dispersion modeling system, the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD). A more detailed discussion of PADEP's modeling analysis for the Warren Area can be found in Pennsylvania's September 29, 2017 submittal, and EPA's analysis of the modeling is discussed in more detail in EPA's modeling TSD, which can be found under Docket ID No. EPA-R03-OAR-2017-0578.

EPA has reviewed the modeling that Pennsylvania submitted to support the attainment demonstration for the Warren Area and has determined that this modeling is consistent with CAA requirements, Appendix W, and EPA's guidance for SO<sub>2</sub> attainment demonstration modeling. The modeling properly characterized source limits, local meteorological data, background concentrations, and provided an adequate model receptor grid to capture maximum modeled concentrations. Using the EPA conversion factor for the SO<sub>2</sub> NAAQS, the final modeled design value for the Warren Area is less than 75 ppb. Therefore, EPA is proposing to

<sup>&</sup>lt;sup>5</sup> The SO<sub>2</sub> NAAQS level is expressed in ppb but AERMOD gives results in  $\mu g/m^3$ . The conversion factor for SO<sub>2</sub> (at the standard conditions applied in the ambient SO<sub>2</sub> reference method) is 1 ppb = approximately 2.619  $\mu g/m^3$ . See Pennsylvania's SO<sub>2</sub> Round 3 Designations proposed TSD at https://www.epa.gov/sites/production/files/2017-08/documents/35\_pa\_so2\_rd3-final.pdf.

determine that the analysis demonstrates that the source limits used in the modeling demonstration comply with the 1-hour SO<sub>2</sub> NAAQS. EPA's analysis of the modeling is discussed in more detail in EPA's modeling TSD, which can be found under Docket ID No. EPA-R03-OAR-2017-0578. EPA proposes to conclude that the modeling provided in the attainment plan shows that the Warren Area will attain the 2010 1-hour primary SO<sub>2</sub> NAAQS by the attainment date.

#### D. RACM/RACT

CAA section 172(c)(1) requires that each attainment plan provide for the implementation of all reasonably available control measures (i.e., RACM) as expeditiously as practicable and shall provide for attainment of the NAAQS. EPA interprets RACM, including RACT, under section 172, as measures that a state determines to be both reasonably available and contribute to attainment as expeditiously as practicable "for existing sources in the area."

Pennsylvania's September 29, 2017 submittal discusses federal and state measures that will provide emission reductions leading to attainment and maintenance of the 2010 SO<sub>2</sub> NAAQS. With regards to state rules, Pennsylvania cites to its low sulfur fuel rules, which were SIP-approved on July 10, 2014 (79 FR 39330). Pennsylvania's low sulfur fuel oil provisions apply to refineries, pipelines, terminals, retail outlet fuel storage facilities, commercial and industrial facilities, and facilities with unit burning regulated fuel oil to produce electricity and for domestic home heaters. These low sulfur fuel oil rules reduce the amount of sulfur in fuel oils used in combustion units, thereby reducing SO<sub>2</sub> emissions and the formation of sulfates that cause decreased visibility. In terms of federal measures, Pennsylvania explains that 19 sources at United Refining are required to comply with the Boiler Maximum Achievable Control

Technology (MACT), as well as four sources that are required to comply with 40 CFR part 63, subpart UUU, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Petroleum Refineries (the Refinery MACT 2). EPA notes that although Pennsylvania incorporates by reference the NESHAP and MACT, they are not in the Pennsylvania SIP.

Pennsylvania's submittal discusses that enforceable emission changes have been in place at United Refining since 2015 that reduce the SO<sub>2</sub> emissions from the facility. The facility switched from high sulfur (2.8% sulfur) fuel oil to a lower sulfur fuel oil (0.5% sulfur) in 11 combustion units and heaters. Also, in July 2015, United Refining increased the amount of the flue gas desulfurization additive (De-Sox) used for one of the emitting source's (Source ID 101A) catalyst, which prevents the formation of SO<sub>2</sub> during the catalyst regeneration process.

Based on the modeling analysis discussed in section IV.C. Air Quality Modeling, in order to ensure that the Warren Area demonstrates attainment with the SO<sub>2</sub> NAAQS, emission limits established in a Consent Order and Agreement (COA) (*see* Appendix B of the September 29, 2017 submittal) between PADEP and United Refining, will be used to control SO<sub>2</sub> emissions from United Refining. The collective emission limits and related compliance parameters have been proposed for incorporation into the SIP to make these changes federally enforceable. The compliance parameters include United Refining burning certain fuel types; monitoring, record-keeping, and reporting; conducting emission testing; using De-Sox additive where appropriate; and using continuous emission monitoring systems (CEMS). PADEP asserts that this proposed control strategy lowers the modeled SO<sub>2</sub> impacts from United Refining and is sufficient for the Warren Area to attain the 2010 SO<sub>2</sub> NAAQS. The new emission limits for each of the SO<sub>2</sub>-emitting sources at United Refining are listed in Table 3. PADEP affirms that the

implementation of new emission limits and corresponding compliance parameters serve as RACM/RACT at United Refining, and will enable the Warren Area to attain and maintain the  $SO_2$  NAAQS.

**Table 3. United Refining New Emission Limits** 

Source ID	Source Description	SO <sub>2</sub> Emission Limit (pounds	
		per hour or lbs/hr)	
031, 032, 033	Boiler 1, 2, and 3	27.42	
034	Boiler 4	7.21	
036	Boiler 5B	0.24	
042	FCC Heater	1.10	
044	DHT Heater 1	0.10	
049	East Reformer Heater	22.42	
050	Crude Heater - North	27.78	
050A	Crude Heater - South	27.78	
051	Pretreater Heater	11.00	
052	West Reformer Heater	2.20	
053	Sat Gas Plant Reboiler	0.40	
054	Vacuum Process Heater	0.80	
055	DHT Heater 2	6.36	
056	Prefactionator Reboiler 2	5.37	
057	Volcanic Heater (T-241)	0.30	
101A	FCC Unit	131.50	
102	Blowdown System – Combo	0.40	
	Flare		
102	Blowdown System – FCC Flare	0.10	
105	Middle FCC KVG Compressor	0.14	
106	East FCC KVG Compressor	0.14	
107	Sat Gas KVG Compressor	0.10	
108	Claus Sulfur Plant 2	12.00	
108A	Sulfur Plant 2 Hot Oil Heater	0.10	
211	Loading Rack Bottom Loading	0.81	
037	Boiler 6	4.60	
1010	SMR Hydrogen Plant	0.099	
C1010	Elevated Process Flare	0.47	

EPA is proposing to approve Pennsylvania's determination that the proposed SO<sub>2</sub> control strategy at United Refining constitutes RACM/RACT for that source in the Warren Area based on the modeling analysis previously described. The Area is projected to begin showing attaining

monitoring values for the 2010 SO<sub>2</sub> NAAQS by the 2018 attainment date. Furthermore, PADEP requests that the emission limits listed in Table 3 and corresponding compliance parameters found in the unredacted portions of the COA for United Refining will become permanent and enforceable SIP measures to meet the requirements of the CAA. EPA, therefore, proposes to approve Pennsylvania's September 29, 2017, SIP submittal as meeting the RACM/RACT requirements of section 172(c) of the CAA.

### E. RFP Plan

Section 172(c)(2) of the CAA requires that an attainment plan include a demonstration that shows reasonable further progress (i.e., RFP) for meeting air quality standards will be achieved through generally linear incremental improvement in air quality. Section 171(1) of the CAA defines RFP as "such annual incremental reductions in emissions of the relevant air pollutant as are required by this part (part D) or may reasonably be required by EPA for the purpose of ensuring attainment of the applicable NAAQS by the applicable attainment date." As stated originally in the 1994 SO<sub>2</sub> Guidelines Document<sup>6</sup> and repeated in the 2014 SO<sub>2</sub> Nonattainment Guidance, EPA continues to believe that this definition is most appropriate for pollutants that are emitted from numerous and diverse sources, where the relationship between particular sources and ambient air quality are not directly quantified. In such cases, emissions reductions may be required from various types and locations of sources. The relationship between SO<sub>2</sub> and sources is much more defined, and usually there is a single step between pre-control nonattainment and post-control attainment. Therefore, EPA interpreted RFP for SO<sub>2</sub> as adherence to an ambitious compliance schedule in both the 1994 SO<sub>2</sub> Guideline Document and the 2014 SO<sub>2</sub> Nonattainment Guidance. The control measures for attainment of the 2010 SO<sub>2</sub> NAAQS

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<sup>&</sup>lt;sup>6</sup> SO<sub>2</sub> Guideline Document, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, EPA–452/R–94–008, February 1994. Located at: http://www.epa.gov/ttn/oarpg/t1pgm.html.

included in Pennsylvania's submittal have been modeled to achieve attainment of the NAAQS. The permits and the adoption of specific emission limits and compliance parameters require these control measures and resulting emission reductions to be achieved as expeditiously as practicable. As a result, based on air quality modeling reviewed by EPA, this is projected to yield a sufficient reduction in SO<sub>2</sub> emissions from United Refining resulting in modeled attainment of the SO<sub>2</sub> NAAQS for the Warren Area. Therefore, EPA has determined that PADEP's SO<sub>2</sub> attainment plan fulfills the RFP requirements for the Warren Area. EPA does not anticipate future nonattainment, or that the Area will not meet the October 4, 2018, attainment date. EPA proposes to approve Pennsylvania's attainment plan with respect to the RFP requirements.

# F. Contingency Measures

In accordance with section 172(c)(9) of the CAA, contingency measures are required as additional measures to be implemented in the event that an area fails to meet the RFP requirements or fails to attain the standard by its attainment date. These measures must be fully adopted rules or control measures that can be implemented quickly and without additional EPA or state action if the area fails to meet RFP requirements or fails to meet its attainment date, and should contain trigger mechanisms and an implementation schedule. However, SO<sub>2</sub> presents special considerations. As stated in the final 2010 SO<sub>2</sub> NAAQS promulgation on June 22, 2010 (75 FR 35520) and in the 2014 SO<sub>2</sub> Nonattainment Guidance, EPA concluded that because of the quantifiable relationship between SO<sub>2</sub> sources and control measures, it is appropriate that state agencies develop a comprehensive program to identify sources of violations of the SO<sub>2</sub> NAAQS and undertake an aggressive follow-up for compliance and enforcement.

The United Refining COA (see Appendix B of the September 29, 2017 submittal) contains the

following measures that are designed to keep the Warren Area from triggering an exceedance or violation of the SO<sub>2</sub> NAAQS: (1) If the SO<sub>2</sub> emissions from the FCC Unit (Source ID 101A) exceeds the validated lbs/hr permitted emission limit listed in Table 3, the facility will perform an audit of the unit's SO<sub>2</sub> control additive system, which will include injection of the proper amount of De-SOx additive, and within 45 days of the exceedance, submit a report to PADEP; (2) If the Warren Overlook SO<sub>2</sub> ambient air quality monitor (ID 42-123-0005) located within the nonattainment area measures a third daily maximum 1-hour SO2 concentration for any hour greater than 75 parts per billion (ppb) within a calendar year (if this occurs on two days back-toback, it will be counted as one; if there are three days in a row, it will be counted as two), after verification and notification by PADEP, within 90 calendar days, United Refining must submit an investigative report to PADEP. If the report concludes that SO<sub>2</sub> emissions from one or more SO<sub>2</sub>-emitting sources at the facility caused an exceedance, the report must include proposed changes in the facility operations that would be needed in order to avoid a violation of the SO<sub>2</sub> NAAQS; (3) If PADEP identifies a daily maximum SO<sub>2</sub> concentration exceeding 75 ppb at a PADEP-operated SO<sub>2</sub> ambient air quality monitor in the Warren Area, within five days, PADEP will contact United Refining to trigger the implementation of the daily exceedance report contingency measure described above in (2); (4) Section 4(27) of the Pennsylvania Air Pollution Control Act (APCA) authorizes PADEP to take any action it deems necessary or proper for the effective enforcement of APCA and the rules and regulations promulgated under APCA. Such actions include the issuance of orders and the assessment of civil penalties.

EPA is proposing to find that Pennsylvania's September 29, 2017 submittal includes sufficient measures to expeditiously identify the source of any violation of the SO<sub>2</sub> NAAQS and for aggressive follow-up including enforcement measures within PADEP's authority as necessary.

Therefore, EPA proposes that the contingency measures submitted by Pennsylvania follow the 2014 SO<sub>2</sub> Nonattainment Guidance and meet the section 172(c)(9) requirements.

## G. New Source Review<sup>7</sup>

Section 172(c)(5) of the CAA requires that an attainment plan require permits for the construction and operation of new or modified major stationary sources in a nonattainment area. Pennsylvania has a fully implemented nonattainment new source review (NNSR) program for criteria pollutants in 25 Pennsylvania Code Chapter 127, Subchapter E, which was approved into the Pennsylvania SIP on December 9, 1997 (62 FR 64722). On May 14, 2012 (77 FR 28261), EPA approved a SIP revision pertaining to the pre-construction permitting requirements of Pennsylvania's NNSR program to update the regulations to meet EPA's 2002 NSR reform regulations. EPA then approved an update to Pennsylvania's NNSR regulations on July 13, 2012 (77 FR 41276). These rules provide for appropriate new source review as required by CAA sections 175(c)(5) and 173 and 40 CFR 51.165 for SO<sub>2</sub> sources undergoing construction or major modification in the Warren Area without need for modification of the approved rules. Therefore, EPA concludes that the Pennsylvania SIP meets the requirements of section 172(c)(5) for this Area.

### IV. EPA's Proposed Action

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<sup>&</sup>lt;sup>7</sup> The CAA new source review (NSR) program is composed of three separate programs: Prevention of significant deterioration (PSD), Nonattainment NSR (NNSR), and Minor NSR. PSD is established in part C of title I of the CAA and applies in undesignated areas and in areas that meet the NAAQS— "attainment areas"—as well as areas where there is insufficient information to determine if the area meets the NAAQS—designated "unclassifiable areas." The NNSR program is established in part D of title I of the CAA and applies in areas that are not in attainment of the NAAQS—"nonattainment areas." The Minor NSR program addresses construction or modification activities that do not qualify as "major" and applies regardless of the designation of the area in which a source is located. Together, these programs are referred to as the NSR programs. Section 173 of the CAA lays out the NNSR program for preconstruction review of new major sources or major modifications to existing sources, as required by CAA section 172(c)(5). The programmatic elements for NNSR include, among other things, compliance with the lowest achievable emissions rate and the requirement to obtain emissions offsets.

EPA is proposing to approve Pennsylvania's SIP revision for the Warren Area, as submitted through PADEP to EPA on September 29, 2017 for the purpose of demonstrating attainment of the 2010 1-hour SO<sub>2</sub> NAAQS. Specifically, EPA is proposing to approve the base year emissions inventory, a modeling demonstration of SO<sub>2</sub> attainment, an analysis of RACM/RACT, a RFP plan, and contingency measures for the Warren Area, and is proposing that the Pennsylvania SIP has met requirements for NSR for the 2010 1-hour SO<sub>2</sub> NAAQS. Additionally, EPA is proposing to approve into the Pennsylvania SIP specific SO<sub>2</sub> emission limits and compliance parameters established for the SO<sub>2</sub> source impacting the Warren Area.

EPA has determined that Pennsylvania's SO<sub>2</sub> attainment plan for the 2010 1-hour SO<sub>2</sub> NAAQS for Warren County meets the applicable requirements of the CAA and comports with EPA's recommendations discussed in the 2014 SO<sub>2</sub> Nonattainment Guidance. Thus, EPA is proposing to approve Pennsylvania's attainment plan for the Warren Area as submitted on September 29, 2017. EPA's analysis for this proposed action is discussed in Section IV of this proposed rulemaking. EPA is soliciting public comments on the issues discussed in this document. These comments will be considered before taking final action. Final approval of this SIP submittal will remove EPA's duty to promulgate and implement a FIP under CAA section 110(c).

### V. Incorporation by Reference

In this proposed rule, EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is proposing to incorporate by reference the portions of the Consent Order and Agreement entered between Pennsylvania and United Refining Company on September 29, 2017, that are not redacted. This includes emission limits and associated compliance parameters, record-keeping

and reporting, and contingency measures. EPA has made, and will continue to make, these materials generally available through http://www.regulations.gov and at the EPA Region III Office (please contact the person identified in the "For Further Information Contact" section of this preamble for more information).

# VI. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because
   SIP approvals are exempted under Executive Order 12866;
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);

Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255,

August 10, 1999);

Is not an economically significant regulatory action based on health or safety risks subject to

Executive Order 13045 (62 FR 19885, April 23, 1997);

Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May

22, 2001);

Is not subject to requirements of Section 12(d) of the National Technology Transfer and

Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements

would be inconsistent with the CAA; and

Does not provide EPA with the discretionary authority to address, as appropriate,

disproportionate human health or environmental effects, using practicable and legally

permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this proposed rule, concerning the SO<sub>2</sub> attainment plan for the Warren nonattainment

area in Pennsylvania, does not have tribal implications as specified by Executive Order 13175

(65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country

located in the State, and EPA notes that it will not impose substantial direct costs on tribal

governments or preempt tribal law.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Reporting and

recordkeeping requirements, Sulfur oxides.

Authority: 42 U.S.C. 7401 et seq.

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Dated: March 13, 2018.

Cecil Rodrigues,
Acting Regional Administrator,
Region III.

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